introducing a nucleic acid construct into a plant, wherein said nucleic acid construct comprises a polynucleotide that encodes a polypeptide having at least 80% sequence identity to SEQ ID NO:2, wherein said polypeptide possesses β-ketoacyl synthase activity, wherein said construct is expressed and wherein said polypeptide is effective for altering the levels of very long chain fatty acids in said plant.

41. (New) The plant of claim 33, wherein said construct further comprises a regulatory element operably linked to said poynucleotide.

42. (New) The plant of claim 41, wherein said regulatory element is a tissue-specific promoter.

43. (New) The plant of claim 42, wherein said regulatory element is an epidermal cell-specific promoter.

44. (New) The plant of claim 42, wherein said regulatory element is a seed-specific promoter that is operably linked in sense orientation to said polynucleotide.

45. (New) The method of claim 40, wherein expression of said nucleic acid is tissue-specific.

46. (New) The method of claim 45, wherein said expression is epidermal cell-specific expression.

47. (New) The method of claim 45, wherein said expression is seed-specific expression.

48. (New) The method of claim 40, wherein said construct further comprises a regulatory element operably linked to said poynucleotide.

49. (New) The method of claim 48, wherein said regulatory element is a tissue-specific promoter.

50. (New) The method of claim 49, wherein said regulatory element is an epidermal cell-specific promoter.

51. (New) The method of claim 49, wherein said regulatory element is a seed-specific promoter that is operably linked in sense orientation to said polynucleotide.